# Alice E White

List of Publications by Year
in descending order



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|---|---|---|---|
| 94 papers | 6,064 citations | 101535 36 h-index | 69246 77 g-index |
| 96 all docs | 96 docs citations | 96 times ranked | 3501 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Superconductivity near 30 K without copper: the Ba0.6K0.4BiO3 perovskite. Nature, 1988, 332, 814-816. | 27.8 | 1,192 |
| 2 | Isotope Effect in the High-TcSuperconductorsBa2YCu3O7andBa2EuCu3O7. Physical Review Letters, 1987, 58, 2333-2336. | 7.8 | 519 |
| 3 | Equilibrium shape of Si. Physical Review Letters, 1993, 70, 1643-1646. | 7.8 | 478 |
| 4 | Mesotaxy: Singleâ€crystal growth of buried CoSi2layers. Applied Physics Letters, 1987, 50, 95-97. | 3.3 | 420 |
| 5 | Nonzero isotope effect inLa1.85Sr0.15CuO4. Physical Review Letters, 1987, 59, 912-914. | 7.8 | 221 |
| 6 | Destruction of superconductivity in quench-condensed two-dimensional films. Physical Review B, 1986, 33, 3549-3552. | 3.2 | 164 |
| 7 | Demonstration of a Tunable Microwave-Photonic Notch Filter Using Low-Loss Silicon Ring Resonators. Journal of Lightwave Technology, 2009, 27, 2105-2110. | 4.6 | 153 |
| 8 | Ion-beam-induced metal-insulator transition inYBa2Cu3O7âˆ'Î´: A mobility edge. Physical Review B, 1989, 39, 11599-11602. | 3.2 | 144 |
| 9 | Insituepitaxial growth of Y1Ba2Cu3O7âˆ'xfilms by molecular beam epitaxy with an activated oxygen source. Applied Physics Letters, 1988, 53, 2683-2685. | 3.3 | 142 |
| 10 | Breakdown of Eliashberg Theory for Two-Dimensional Superconductivity in the Presence of Disorder. Physical Review Letters, 1986, 57, 2195-2198. | 7.8 | 131 |
| 11 | Sharp angular sensitivity of pinning due to twin boundaries in Ba2YCu3O7. Applied Physics Letters, 1990, 56, 2465-2467. | 3.3 | 107 |
| 12 | Ion-beam-induced destruction of superconducting phase coherence inYBa2Cu3O7âˆ'Î´. Physical Review B, 1988, 37, 3755-3758. | 3.2 | 100 |
| 13 | Controllable reduction of critical currents in YBa2Cu3O7âˆ'Î´films. Applied Physics Letters, 1988, 53, 1010-1012. | 3.3 | 98 |
| 14 | Critical currents in protonâ€irradiated singleâ€crystal Ba2YCu3O7âˆ'Î´. Applied Physics Letters, 1990, 56, 2681-2683. | 3.3 | 91 |
| 15 | Demonstration of a Fourth-Order Pole-Zero Optical Filter Integrated Using CMOS Processes. Journal of Lightwave Technology, 2007, 25, 87-92. | 4.6 | 83 |
| 16 | Enhanced strain relaxation in Si/GexSi1âˆ'x/Si heterostructures via pointâ€defect concentrations introduced by ion implantation. Applied Physics Letters, 1990, 56, 2445-2447. | 3.3 | 81 |
| 17 | Mechanisms of buried oxide formation by ion implantation. Applied Physics Letters, 1987, 50, 19-21. | 3.3 | 77 |
| 18 | Preparation of superconducting thin films of calcium strontium bismuth copper oxides by coevaporation. Applied Physics Letters, 1988, 52, 1828-1830. | 3.3 | 73 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | From Simple to Architecturally Complex Hydrogel Scaffolds for Cell and Tissue Engineering Applications: Opportunities Presented by Twoâ€Photon Polymerization. Advanced Healthcare Materials, 2020, 9, e1901217. | 7.6 | 70 |
| 20 | Evidence for Interaction Effects in the Low-Temperature Resistance Rise in Ultrathin Metallic Wires. Physical Review Letters, 1982, 48, 1752-1755. | 7.8 | 64 |
| 21 | Silicon RF-Photonic Filter and Down-Converter. Journal of Lightwave Technology, 2010, 28, 3019-3028. | 4.6 | 61 |
| 22 | Correction to the two-dimensional density of states. Physical Review B, 1985, 31, 1174-1176. | 3.2 | 55 |
| 23 | Parameters forinsitugrowth of highTcsuperconducting thin films using an oxygen plasma source. Applied Physics Letters, 1988, 53, 441-443. | 3.3 | 54 |
| 24 | A micro-scale printable nanoclip for electrical stimulation and recording in small nerves. Journal of Neural Engineering, 2017, 14, 036006. | 3.5 | 52 |
| 25 | Carbon fiber on polyimide ultra-microelectrodes. Journal of Neural Engineering, 2018, 15, 016010. | 3.5 | 50 |
| 26 | Formation of continuous CoSi2layers by high Co dose implantation into Si(100). Journal of Applied Physics, 1990, 68, 1629-1634. | 2.5 | 49 |
| 27 | Mesotaxy: Synthesis of buried single-crystal silicide layers by implantation. Nuclear Instruments & Methods in Physics Research B, 1989, 39, 253-258. | 1.4 | 48 |
| 28 | Patterned Electrical Conductance and Electrode Formation in Ionâ€Implanted Diamond Films. Journal of the Electrochemical Society, 1994, 141, L41-L43. | 2.9 | 48 |
| 29 | 40-wavelength add drop filter. IEEE Photonics Technology Letters, 1999, 11, 1437-1439. | 2.5 | 48 |
| 30 | Low-temperature magnetoresistance in two-dimensional magnesium films. Physical Review B, 1984, 29, 3694-3696. | 3.2 | 45 |
| 31 | Application of â‰Š100 Ã… linewidth structures fabricated by shadowing techniques. Journal of Vacuum Science and Technology, 1981, 19, 892-896. | 1.9 | 44 |
| 32 | Ion beam thinning and polishing of YBa2Cu3O7films. Applied Physics Letters, 1989, 55, 1915-1917. | 3.3 | 44 |
| 33 | Dynamic Actuation of Soft 3D Micromechanical Structures Using Microâ€Electromechanical Systems (MEMS). Advanced Materials Technologies, 2018, 3, 1700293. | 5.8 | 43 |
| 34 | Propagation of picosecond electrical pulses on a siliconâ€based microstrip line with buried cobalt silicide ground plane. Applied Physics Letters, 1991, 58, 2604-2606. | 3.3 | 42 |
| 35 | Electrical and structural properties of Si/CrSi2/Si heterostructures fabricated using ion implantation. Applied Physics Letters, 1990, 56, 1260-1262. | 3.3 | 41 |
| 36 | CMOS-Compatible Si-Ring-Assisted Machâ€“Zehnder Interferometer With Internal Bandwidth Equalization. IEEE Journal of Selected Topics in Quantum Electronics, 2010, 16, 45-52. | 2.9 | 37 |

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|---|---|---|---|
| 37 | Synthesis of Buried Silicon Compounds Using Ion Implantation. Materials Research Society Symposia Proceedings, 1988, 100, 3. | 0.1 | 35 |
| 38 | Arrayed waveguide lens wavelength add-drop in silica. IEEE Photonics Technology Letters, 1999, 11, 557-559. | 2.5 | 34 |
| 39 | Enhancement of flux pinning by H+and Xe+irradiation in epitaxial thin films of Ba2YCu3O7â˜Î´. Applied Physics Letters, 1992, 60, 2932-2934. | 3.3 | 33 |
| 40 | Oxygen intercalation homogeneity and electrical transport in superconductingBa2YCu3O7â˜Î´crystals. Physical Review B, 1988, 38, 7129-7132. | 3.2 | 31 |
| 41 | Engineering a living cardiac pump on a chip using high-precision fabrication. Science Advances, 2022, 8, eabm3791. | 10.3 | 30 |
| 42 | Quantum transport in narrow MOSFET channels. Surface Science, 1986, 170, 1-13. | 1.9 | 29 |
| 43 | Characterization of GaAs layers grown directly on Si substrates by metalorganic chemical vapor deposition. Journal of Applied Physics, 1987, 62, 862-867. | 2.5 | 29 |
| 44 | Corrections to the one-dimensional density of states: Observation of a Coulomb gap?. Physical Review Letters, 1986, 56, 532-535. | 7.8 | 28 |
| 45 | Advances in fiber optics. Bell Labs Technical Journal, 2002, 5, 168-187. | 0.7 | 28 |
| 46 | Studies of 3D directed cell migration enabled by direct laser writing of curved wave topography. Biofabrication, 2019, 11, 021001. | 7.1 | 28 |
| 47 | Exploiting Si/CoSi2/Si heterostructures grown by mesotaxy. Nuclear Instruments & Methods in Physics Research B, 1991, 59-60, 693-697. | 1.4 | 27 |
| 48 | Ultraviolet laser fabrication of strong, nearly polarizationâ€independent Bragg reflectors in germaniumâ€doped silica waveguides on silica substrates. Applied Physics Letters, 1994, 65, 3308-3310. | 3.3 | 27 |
| 49 | Direct laser writing for cardiac tissue engineering: a microfluidic heart on a chip with integrated transducers. Lab on A Chip, 2021, 21, 1724-1737. | 6.0 | 27 |
| 50 | Temperature dependence of reactive ion etching of GaAs with CCl2F2:O2. Journal of Applied Physics, 1989, 66, 3839-3849. | 2.5 | 25 |
| 51 | Design and Realization of 3D Printed AFM Probes. Small, 2018, 14, e1800162. | 10.0 | 25 |
| 52 | Synthesis of Buried Silicon Compounds Using Ion Implantation. Materials Research Society Symposia Proceedings, 1987, 107, 3. | 0.1 | 24 |
| 53 | Tunable Infrared Metasurface on a Soft Polymer Scaffold. Nano Letters, 2018, 18, 2802-2806. | 9.1 | 24 |
| 54 | Implantation, damage, and regrowth of high Tc superconductors. Nuclear Instruments & Methods in Physics Research B, 1989, 37-38, 923-929. | 1.4 | 23 |

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|---|---|---|---|
| 55 | Formation of cobalt silicide in Co+implanted Si(111). Applied Physics Letters, 1991, 58, 122-124. | 3.3 | 22 |
| 56 | Transport in submicrometer buried mesotaxial cobalt silicide wires. Applied Physics Letters, 1993, 62, 387-389. | 3.3 | 22 |
| 57 | Quantum transport of buried single-crystallineCoSi2layers in (111)Si and (100)Si substrates. Physical Review B, 1993, 48, 8002-8015. | 3.2 | 22 |
| 58 | Printable microscale interfaces for long-term peripheral nerve mapping and precision control. Nature Communications, 2020, 11, 4191. | 12.8 | 22 |
| 59 | Ion beam induced damage and superlattice formation in epitaxial YBa2Cu3O7â˜Î´thin films. Applied Physics Letters, 1989, 54, 1178-1180. | 3.3 | 20 |
| 60 | Amorphization and regrowth in Si/CoSi2/Si heterostructures. Journal of Applied Physics, 1990, 68, 5641-5647. | 2.5 | 20 |
| 61 | Anisotropic strain relaxation in buried CoSi2layers formed by mesotaxy. Journal of Applied Physics, 1990, 67, 787-791. | 2.5 | 20 |
| 62 | High critical currents in c-axis textured Bi-Pb-Sr-Ca-Cu-O superconductor ribbons. Physica C: Superconductivity and Its Applications, 1991, 177, 189-194. | 1.2 | 18 |
| 63 | Buried Oxide and Silicide Formation by High-Dose Implantation in Silicon. MRS Bulletin, 1992, 17, 40-46. | 3.5 | 18 |
| 64 | Effects of 3.1-MeV proton and 1-GeV Au-ion irradiation on the magnetic flux noise and critical current ofYBa2Cu3O7â˜Î´. Physical Review B, 1996, 54, 15411-15416. | 3.2 | 18 |
| 65 | Epitaxial order and resistivity of high temperature superconductors grown on SrTiO3. Journal of Crystal Growth, 1988, 91, 386-391. | 1.5 | 17 |
| 66 | Massively parallel cantilever-free atomic force microscopy. Nature Communications, 2021, 12, 393. | 12.8 | 17 |
| 67 | Evolution of buried compound layers formed by ion implantation. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1992, 12, 107-114. | 3.5 | 15 |
| 68 | Controlled misfit dislocation nucleation in Si0.90Ge0.10epitaxial layers grown on Si. Applied Physics Letters, 1993, 63, 746-748. | 3.3 | 12 |
| 69 | Polarization-insensitive planar lightwave circuit dual-rate Mach-Zehnder delay-interferometer. IEEE Photonics Technology Letters, 2006, 18, 1708-1710. | 2.5 | 11 |
| 70 | Controlled Cell Alignment Using Twoâ€Photon Direct Laser Writingâ€Patterned Hydrogels in 2D and 3D. Macromolecular Bioscience, 2021, 21, e2100051. | 4.1 | 11 |
| 71 | Fabrication of multi-material 3D structures by the integration of direct laser writing and MEMS stencil patterning. Nanoscale, 2019, 11, 3261-3267. | 5.6 | 11 |
| 72 | GaAs-on-Si modulator using a buried silicide reflector. IEEE Photonics Technology Letters, 1992, 4, 140-142. | 2.5 | 9 |

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|---|---|---|---|
| 73 | Mesotaxy: Single-Crystal Growth of Buried Silicide Layers. Materials Research Society Symposia Proceedings, 1987, 93, 93. | 0.1 | 8 |
| 74 | Synthesis of Buried Oxide and Silicide Layers with Ion Beams. Science, 1988, 241, 930-935. | 12.6 | 8 |
| 75 | Temperature dependent segregation of metals at Siâ€“SiO2 interfaces during oxygen ion bombardment. Applied Physics Letters, 1997, 70, 426-428. | 3.3 | 8 |
| 76 | Superconductivity at 121 K in a new bulk Tlâ€Baâ€Caâ€Cuâ€O compound. Applied Physics Letters, 1988, 53, 911-912. | 3.3 | 7 |
| 77 | Coalescence of buried CoSi2layers formed by mesotaxy in Si(111). Journal of Applied Physics, 1991, 70, 7354-7361. | 2.5 | 7 |
| 78 | Mesotaxy Layers of IrSi3 in (111)Si Formed by MeV ION Implantation. Materials Research Society Symposia Proceedings, 1991, 235, 279. | 0.1 | 6 |
| 79 | Ion-Beam-Induced Destruction of Superconducting Phase Coherence in YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7-Î´</sub>. Materials Research Society Symposia Proceedings, 1987, 99, 531. | 0.1 | 5 |
| 80 | Interfacial structure and its effect on nucleation and growth energetics in mesotaxial Si/CoSi2/Si structures. Applied Physics Letters, 1991, 59, 3467-3469. | 3.3 | 5 |
| 81 | Increased pinning energies and critical current densities in heavyâ€ionâ€irradiated Bi2Sr2CaCu2O8single crystals. Applied Physics Letters, 1993, 62, 759-761. | 3.3 | 5 |
| 82 | The Role of Implant Temperature in the Formation of Thin Buried Oxide Layers. Materials Research Society Symposia Proceedings, 1986, 74, 585. | 0.1 | 4 |
| 83 | Optical Fiber Components and Devices. , 1997, , 267-318. | | 4 |
| 84 | Optical modulation techniques for analog signal processing and CMOS compatible electro-optic modulation. , 2008, , . | | 3 |
| 85 | Reconstruction of (100) Silicon/Disilicide Interfaces. Materials Research Society Symposia Proceedings, 1989, 139, 97. | 0.1 | 2 |
| 86 | Lateral Confinement of Silicide Layers Synthesized with High Dose Implantation and Annealing. Materials Research Society Symposia Proceedings, 1989, 147, 223. | 0.1 | 2 |
| 87 | 30 nm CoSi2surface layers for contact metallization in complementary metalâ€oxideâ€semiconductor processes. Applied Physics Letters, 1992, 61, 2311-2313. | 3.3 | 2 |
| 88 | Sub-Micron Mesotaxial CoSi<sub>2</sub> Wires. Materials Research Society Symposia Proceedings, 1992, 279, 881. | 0.1 | 2 |
| 89 | Low Resistivity CoSi<sub>2</sub> Surface Layers for Use as Contacts in CMOS Processes. Materials Research Society Symposia Proceedings, 1991, 224, 109. | 0.1 | 1 |
| 90 | Integrated Optical Components For WDM Systems. Optics and Photonics News, 2000, 11, 26. | 0.5 | 1 |

| # | Article | IF | Citations |
|---|---|---|---|
| 91 | Evolution of Buried Cobalt Silicide Layers Formed by Co Implantation in Si(111). Materials Research Society Symposia Proceedings, 1990, 202, 665. | 0.1 | 0 |
| 92 | Application of Novel Epitaxy Techniques to the Growth of CrSi2. Materials Research Society Symposia Proceedings, 1993, 320, 453. | 0.1 | 0 |
| 93 | Optical Fiber Components and Devices. , 1997, , 267-318. | | 0 |
| 94 | Studies of CoSi2 nano-structures produced by high-dose ion implantation in Si. Proceedings Annual Meeting Electron Microscopy Society of America, 1989, 47, 454-455. | 0.0 | 0 |